Applicant: Gregory John Billington et al.

Serial No.: 10/849,510

Attorney's Docket No.: 07703-0340RE1/WIN0208RE1/

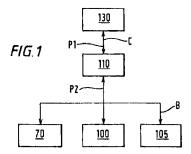
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## REMARKS

Claims 1-8, 10-21, 24-29, 32, 33 and 36-40 are pending for examination in this reissue application. A separate page (below) is enclosed and lists the status of each claim and indicates the support for the amendments.

In the Office action, the claims were rejected under 35 U.S.C. §102(b) as anticipated by NRI Technical Documentation G-55.0562, "NRI Converter for Bill Validators." To anticipate a claim under section 102, a single reference must teach each and every limitation of the claim either expressly or inherently. (MPEP §706.02.V) As discussed below, that is not the case here. Accordingly, reconsideration is requested.

Claim 1, for example, recites a device for handling money that includes a money handling apparatus (*e.g.*, changer 110 in FIG. 1, reproduced below)) with an internal controller (*e.g.*, microcontroller 400 in FIG. 2) for controlling the money handling apparatus. The device has a first port (*e.g.*, port P1) for removable connection to an external controller (*e.g.*, vending machine controller 130) for communication with the internal controller. The internal controller is arranged to communicate over a second port (*e.g.*, port P2) directly with a further money handling device (*e.g.*, device 70, 100 or 105) using a communications protocol. The protocol supports communication between the internal controller and each one of at least first and second different types of money handling devices. The first type of device handles money of a different type from those handled by the second type.



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An aspect of the invention relates to the provision of an additional port (*e.g.*, port P2 in FIG. 1) on a money handling device (*e.g.*, changer 110) to allow piggy-back connection of a money handling device using a protocol that is not fully supported over the main port (*e.g.*, port P1), which connects the money handling device to an external controller. The protocols used for communications over the first and second ports may be entirely different protocols or they may be different versions of the same protocol (*see, e.g.*, U.S. Patent No. 6,390,269, col. 5, lines 51-66 and col. 6, lines 6-21). Thus, the protocol used for communications over the second port may be supported only partially over the first port or may not be supported at all. As recited by claim 1, the communications protocol, which is used by the internal controller to communicate over the second port (*e.g.*, port P2) with the further money handling device, is not fully supported over the first port (*e.g.*, port P1). The internal controller of the first device for handling money controls the money handling apparatus and relays communications between the external controller and the further money handling device.

The NRI reference discloses a changer that is connected to a vendor and to a converter. The converter is a stand-alone unit that is not part of the changer (*see*, *e.g.*, pp. 5-6). The converter is connected, in turn, to a bill validator. Each converter model is designed to operate with only one bill validator type (p. 3). When the converter receives signals from the bill validator, the converter analyzes the signals and transmits the value of the bill to the changer (pp. 3 and 14). Thus, the bill validator is connected to the changer by way of the converter; and the changer and bill validator do not (and, indeed, cannot) communicate directly with one another.

As explained in greater detail below, the NRI reference fails to disclose each and every feature of claim 1 and the other pending claims.

First, neither the converter nor the changer in the NRI reference corresponds to the "money handling apparatus" recited in <u>claim 1</u>. For example, the converter in the NRI reference does not handle money; it simply analyzes signals from the bill validator and converts them to a value that is transmitted to the changer. Furthermore, as the converter in the NRI reference is

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designed to operate with only a single type of bill validator (p. 3), any controller that might be present in the converter does not support communication with "each of at least first and second different types of money handling devices" as recited in claim 1.

Likewise, the changer in the NRI reference does not correspond to the "money handling apparatus" recited in claim 1. Any controller that might be present in the changer would not be capable of communicating directly with the bill validator. Instead, as already noted above, any signals from bill validator must be analyzed and converted by the stand-alone converter unit. According to the NRI reference, all communications between the changer and the bill validator flow through the stand-alone converter unit. Therefore, the changer in the NRI reference does not have an internal controller arranged to communicate over a second port *directly* with a further money handling device, as recited in claim 1.

In addition, the combination of the changer and converter in the NRI reference does not somehow correspond to the "money handling apparatus" and "internal controller" of claim 1. First, the converter of the NRI reference does not control the changer; rather, it simply sends a value signal to the changer based on signals received from the bill validator. Therefore, the converter does not correspond to the claimed "internal controller . . . for controlling the money handling apparatus." In addition, the converter, which is a stand-alone external unit, is not "in the money handling apparatus," as is the internal controller of claim 1. Furthermore, as already pointed out, the converter of the NRI reference is designed to operate with only a single type of bill validator (p. 3). Thus, the converter does not support communication with "each of at least first and second different types of money handling devices" as recited in claim 1.

At least for the foregoing reasons, the rejection of claim 1 should be withdrawn.

The rejections of the claims depending from claim 1 should be withdrawn at least for the same reasons.

In addition, the dependent claims recite additional features that render those claims independently patentable. For example, <u>claim 2</u> recites that first and second types of device are different members of a group consisting of a banknote validator and a card reader. The NRI reference fails to disclose that the converter can communicate with a card reader. Similarly,

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arguments apply to <u>claim 3</u>, which recites that the first and second types of device are different members of a group consisting of a banknote validator, a card reader and a coin dispenser.

Other claims recite further features that are not disclosed by the NRI reference and that the Office action completely fails to address (*see*, *e.g.*, claim 6, reciting that the internal controller is arranged to distinguish between the first and second types of money handling devices *by a code*).

Independent <u>claim 7</u> recites a method of communication for a first money handling apparatus. The method includes communicating with an external controller over a first port of the first money handling apparatus, and communicating directly with a further money handling apparatus over a second port of the first money handling apparatus by means of a communications protocol supporting communication with each one of at least first and second different types of money handling devices. The first type handles money of a different type from that handled by the second type, and the communications protocol is not fully supported over the first port.

For reasons similar to those discussed above in connection with claim 1, communications from either the changer or from the converter in the NRI reference fail to satisfy each and every feature of claim 7. For example, on the one hand, the changer of the NRI reference does not communicate *directly* with the bill validator. On the other hand, the converter of the NRI reference is not a "money handling apparatus" and is designed to operate with only a *single* type of bill validator.

At least for the foregoing reasons, the rejection of claim 7 should be withdrawn.

Independent <u>claim 8</u>, as well as its dependent claims, should be allowed for reasons similar to those discussed above in connection with claim 1.

Furthermore, claim 8 recites that the internal controller in the money handling apparatus is arranged to copy the content of at least some signals between the first port and the second port

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"without modification thereof." In contrast, the NRI reference does not disclose this feature. For

this additional reason, the NRI reference does not anticipate claim 8 and its dependent claims.

Independent claim 14, and its dependent claims, should be allowed for reasons similar to

those discussed above in connection with claim 7, as well as the additional reason discussed

above in connection with claim 8.

Independent claim 15, as well as its dependent claims, should be allowed for reasons

similar to those discussed above in connection with claim 1.

Independent claim 19 recites a method of communication for a money handling device.

The method includes communicating with an external controller via a first port of the money

handling device, and communicating directly with a further money handling device via a second

port of the money handling device according to a communications protocol not fully supported

by the first port. Thus, claim 19, as well as its dependent claims, should be allowed at least for

reasons similar to those discussed above in connection with claim 7.

Independent claim 20, as well as its dependent claims, should be allowed for reasons

similar to those discussed above in connection with claim 1. Furthermore, the NRI reference

fails to disclose receiving or outputting a code representative of the type of money handling

device, as recited in claim 20. The rejections of claim 20 and its dependent claims should be

withdrawn for this additional reason as well.

Independent claims 21 and 36 should be allowed for reasons similar to those discussed

above in connection with claim 1, as well as the additional reasons discussed above in

connection with claim 20.

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Dependent claims <u>37 and 38</u> recite that communications over the second port use a different version of a communications protocol supported by the first port. This feature also is not disclosed by the NRI reference. Therefore, the rejections of claims 37 and 38 should be withdrawn for this additional reason as well.

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

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## Status of claims

Pending: 1-8, 10-21, 24-29, 32-33 and 36-40

Canceled: 9, 22-23, 30-31 and 34-35

## Support for amendments

Claims	Change	Examples of support in the original patent
1, 8, 15,	Clarifies that the internal controller is	Col. 3, lines 24-25 and 29-30; FIG. 2
20, 36	"in the money handling apparatus"	
1, 7, 8,	Clarifies that the internal controller is	FIGS. 1 and 2
14, 15,	arranged to communicate "directly"	
19, 20,	with the further money handling	
21, 36	device" (and similar changes)	
1, 6, 8,	Changes "further device for handling	FIG. 1, reference numerals 70 (card
11, 15,	money" to "further money handling	acceptor), 100 (bill validator), 105 (change
16, 18,	device"	dispenser)
20, 36		•
1, 7, 36	Changes "at least first and second different types of devices for handling money" to "at least first and second different types of money handling devices"	FIG. 1, reference numerals 70 (card acceptor), 100 (bill validator), 105 (change dispenser)
1, 7, 36	Clarifies that the communications protocol supports communication with "each" of at least first and second different types of money handling devices	Col. 2, lines 53-66

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The Petition for Extension of Time fee is being paid by way of Deposit Account authorization via the EFS System. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

Date:  $\frac{g}{l}$ /(c

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